REMARKS

Reconsideration of the application is requested in view of the modifications above and the remarks below. Claim 2 and 8-14 are pending. Claim 13 has been amended to correct for minor grammatical errors. Further, Applicants offer evidence in the form of a Declaration, submitted herewith, showing that the claimed and cited art referenced products differ.

Rejection under 35 USC 112

The Office Action rejects Claim 13 under 35 USC 112, second paragraph, as indefinite. In light of the comments in the outstanding office action, Claim 13 has been amended. Accordingly, the rejection is moot.

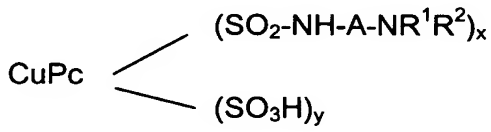
Rejections under 35 USC 103

1. The Office Action rejects Claims 2, 8-11 and 14 are rejected under 35 USC 103(a) as unpatentable over Yanagisawa et al. The rejection should be withdrawn in view of the remarks below.

The rejection does not establish a prima facie case of obviousness. It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970). The rejection should be withdrawn in view of the remarks below.

Applicants' invention is directed to an optical data carrier comprising a

transparent substrate, a writable information layer applied to a surface of said substrate and an optional reflection layer, said writable information layer containing at least one phthalocyanine dye of the general formula I,



formula I

in which

CuPc represents a copper phthalocyanine group,

A represents an optionally substituted straight chain or branched C_2-C_6 alkylene,

R^1 and R^2, independently represent a member selected from the group consisting of hydrogen, straight chain or branched C_1-C_6 alkylene, substituted C_1-C_6 hydroxyalkyl, and an unsubstituted C_1-C_6 alkyl group, or R^1 and R^2, together with the nitrogen atom to which they are bonded denote a heterocyclic 5- or 6-membered ring , optionally containing another heteroatom

x is 2.0 to 4.0,

y is 0 to 1.5 and

and the sum of x and y is 2.0 to 4.0.

The Office Action alleges that:
Yanagisawa et al. '171 teaches in example 1, the application of a silicon phthalocyanine dye having four sulfoamido groups bound to the phenyl rings of the phthalocyanine moiety in a methanol solution to a polycarbonate substrate to a thickness of 0.2 microns, followed by a gold reflective film and

a UV cured resins protective layer and its use as an optical recording medium. *(517-58).* The use of various metal centers, such as Cu is disclosed. (3/67-68) The substituents may be between 0 and 4 (3/64-66). Useful reflective layers are disclosed. (4/10-18). Useful solvents for the recording film, including tetrafluoropropanol, methanol, diacetone alcohol, 2 ethoxyethanol (CELLOSOLVE) 2-methoxyethanol, and isopherone are disclosed (4/5-9) It would have been obvious to one skilled in the art to modify the example of Yanagisawa et al. '171 to use a copper metal center, rather than the Si metal center with a reasonable expectation of achieving comparable results based upon the disclosure of equivalence. Further it would have been obvious to use mixtures of the solvents disclosed as useful with these compounds to provide a good coating solution. Based upon the location of the substituents in the formula and their association (x and y combined add to between two and four), the examiner interprets the coverage to require the recited substitutents to be bound to the phthalocyanine moiety and not the metal (copper) (Office Action, page 2 and 3).

Yanagisawa et al discloses radicals of the Pc, for example, sulphonamide. However, in the radical disclosed, the metal atom of the Pc must have ligands. In fact, Yanagisawa et al discloses at least one ligand R1 and/or R2 (col 3, line 59).

Further, the Office Action alleges that the use of various metal centers such as Cu is disclosed at col 3, line 68. Unfortunately, however, Applicants believe that there is no CuPc known having ligands at the Cu atom. And, there is neither a compound claim nor a process for the preparation of such a compound disclosed therein. Thus, Applicants' believe that the disclosure in Yanagisawa et al was made inadvertently. Further, Yanagisawa et al does not disclose any examples in which the dye has a Cu-atom as a center. Therefore, it would not have been obvious for one skilled in the art to modify Yanagisawa et al and use a copper metal center rather than a Si metal center with a reasonable expectation of achieving comparable results of Applicants' invention. Accordingly, Yanagisawa et al does not obviate Applicants' invention. Reconsideration is requested.

2. Claims 2, 8-11 and 14 are rejected under 35 USC 103(a) as unpatentable over Miyazaki et al in view of Kovacs et al. The rejection should be withdrawn in view of the remarks below.

The Office Action alleges:

> Miyazaki et al. JP 63-307987 teaches optical recording media embraced by the formula except in examples 1,8,13 and 15, but use different metal centers. These are spin coated from Chloroform solutions onto a polymeric substrate. Kovacs et al. EP 0519395 teaches various central metals, metal oxides and metal chlorides, including Cu. (3/55-57). The use of various solvents is disclosed. (12/29-36). The use of binders is disclosed. (12/37) It would have been obvious to one skilled in the art to modify the example of Miyazaki et al. JP 63-307987 to use a copper metal center, rather than the metal center of examples 1,8,13 and 15 with a reasonable expectation of achieving comparable results based upon the disclosure of equivalence by Kovacs et al. EP 0519395 and the direction to use metals in general by Miyazaki et al. JP 63-307987. Further it would have been obvious to use mixtures of the solvents disclosed as useful with these compounds to provide a good coating solution (Office Action, page 3).

Miyazaki et al discloses Pc having sulphonamido groups, however no Cu atom is disclosed as metal center as in Applicants' invention. Compounds similar to those of exp.1 and 8h of Miyazaki et al were compared with Applicants' invention of Example 1. Applicants' invention provided a substantially better solubility in the most common solvents used for spin coating processes such that product was completely dissolved (see Declaration, pages 3 and 4, provided herewith). Specifically, the compounds of Miyazaki et al cannot be used for this application technique without causing serious problems in the production line including that the product does not completely dissolve (see Declaration, page 3, provided herewith).

Regarding Kovacs et al, Kovacs et al discloses a general formula of a metal-Pc wherein the metal can be Cu (page 3, l.53). Although a radical of the Pc can be a sulphonamido (see p. 3, l. 25-30), neither R or R' is an alkylamino. The alkyl radicals of R or R' (page 3, line 25-42) are unsubstituted as Kovacs et al explicitly discloses that the aromatic radical may be substituted, and not the alkyl radical. Thus, Kovacs et al does not allow an amino group terminal to be an alkyl group. Further, experimental results of the compound of exp. 71 were compared with the Applicants' Example 1. The comparison experimental results indicated Applicants' invention had a substantially better solubility in the most common solvents used for spin coating processes (see Declaration, pages 3 and 4, provided herewith). Thus, the compounds of Kovacs et al cannot be used for spin coating processes without

causing serious problems in the production line (see Declaration, page 3 provided herewith).

One skilled in the art could not modify the teachings of Miyazaki et al with the teachings of Kovacs et al and arrive at Applicants' invention. Further, one skilled in the art would not expect that a combination of Miyazaki et al and Kovacs et al would result in improved solubility of the compounds in the most common solvents for spin coating. Thus, neither Miyazaki et al nor Kovacs et al, alone or in combination, teach or suggest Applicants' invention. Reconsideration is requested.

3. Claims 2, 8-11 and 14 are rejected under 35 USC 103(a) as unpatentable over Yanagisawa et al in view of Sasawaka et al and Nett et al. The rejection should be withdrawn in view of the remarks below.

The Office Action alleges that:

> Sasakawa et al. '094 who clearly points to the use of solvent mixtures for phthacyanine dye solutions used to cast optical recording media layers and Nett et al. '064 which teaches copper phthalocyanine dyes having four sulfoamido groups bound to the phenyl rings of the phthacyanine moiety are known to be compatible with various binders, such as cellulosic polymers and that these are soluble in various solvents including those disclosed by Sasakawa et al. '094 which further renders the modification of the examples of Yanagisawa et al. '171 by the use of mixed solvents obvious. (Office Action, page 4, line 19 to page 5, line 2).

However as discussed, Yanagisawa et al the radicals of the Pc may be a sulphonamide, but the metal atom of the Pc must have ligands, at least one (col 3, line 59), and there is no teaching or suggestion of CuPc having ligands at the Cu atom. Thus, Applicants believe that there is no CuPc known having ligands at the Cu atom, there is neither a compound claim nor a process for the preparation of such a compound disclosed therein and that the disclosure in Yanagisawa et al was made inadvertently. Accordingly, one skilled in the art would not modify Yanagisawa et al with the teachings of Nett et al and Sasakawa et al and arrive at Applicants' invention.

Regarding Sasawaka et al, Sasawaka et al discloses a process for the preparation of optical data storage media containing Pcs using special solvents. However, Sasawaka et al does not disclose CuPc of formula 1 of Applicants' invention. Thus, Sasawaka et al does not suggest the dye to be used in the information layer, and specifically not the dye of Applicants' invention. Sasawaka et al in col 3 line 30-40 discloses phthalocyanine, but no CuPc of Applicants' invention is disclosed. Applicants' invention including dye of formula I, is not taught or suggested by Sasawaka et al.

Regarding Nett et al, Nett et al merely discloses surface finishes or printing inks having a pigment including CuPc that are soluble in various solvents. The mere fact that references can be combined or modified does not render the resultant combination obvious uniess the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Even though Nett et al may teach various solvents including those disclosed by Sasakawa et al, there is no teaching or suggestion to use the phthalocyanine dyes of the printing inks and surface finishes in Nett et al in the optical recording layers of Sasakawa et al. Further, there is no teaching or suggestion then to further modify Yanagisawa et al with the solvent. Reconsideration is requested.

4. The Office Action rejects Claims 2 and 8-14 under 35 USC 103(a) as unpatentable over Yanagisawa et al in view of Sasakawa et al and Nett et al and further in view of Lacroix, Crouse and Miyazaki et al. The rejection should be withdrawn in view of the remarks below.

The Office Action alleges that Lacroix et al. '650 teaches phthalocyanine compounds embraced by the claims, but discloses them only for use as dyes, particularly for cellulosic materials such as paper.

The Office Action alleges that Crounse '710 teaches phthalocyanine compounds embraced by the claims, but discloses them only for use as dyes, particularly for cellulosic materials.

Both Lacroix and Crouse disclose using dyes with cellulosic materials. However, there is no teaching or suggestion to combine Yanagisawa et al,

Sasakawa et al, Nett et al, and Miyazaki et al with Lacroix, Crouse to arrive at Applicants' invention. Reconsideration is requested

In view of the modifications and remarks above, a Notice of Allowance is earnestly requested.

Respectfully submitted,

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